

TECHNICAL DATA SHEET FOR

## FLOOR-PRO 305 SF EPOXY FINISH

FLOOR-PRO 305 SF EPOXY FINISH is a two-component, solvent-free high performance epoxy coating. It is developed specifically as chemical and an abrasion resistance topcoat for areas with light and high traffic

### FEATURES

- Solvent-free, low VOC
- High chemical resistance to wide range of chemicals
- Hard wearing, excellent abrasion resistance
- Easy cleaning and maintenance
- Easy to apply
- Complied with BS 6920 requirement

### APPLICATION AREAS

- Ideal to use at areas which require good chemical, abrasion and impact resistance such as industrial floor, printing pulp paper, mills, refineries, car park deck, automotive assembly, aircraft hangar, garages, laboratories, electronic, clean rooms and pharmaceutical

### PHYSICAL PROPERTIES

Chemical Composition	Solvent-free modified cycloaliphatic epoxy
Colour	As per standard colours
Solid Content, mixed	100%

### PERFORMANCE DATA

Adhesive strength	> 1.5 N/mm <sup>2</sup> (Concrete failure) (ASTM D4541)
Compressive Strength	> 50 N/mm <sup>2</sup>
Flexural Strength	> 35 N/mm <sup>2</sup>
Tensile Strength	15 N/mm <sup>2</sup>
Taber Abraser Wear Index	< 64mg / 1000 revolutions (ASTM D4060)
Shore D Hardness	> 75-80
Water Permeability	Nil-Karsten test (Impermeable)
Cytotoxicity (2.4 or less)	Below < 0.5
Dissolved Oxygen Difference	<2.39 or less, mg/L (MDOD BS 6920:Part 1)

\*Conditions such as installation process, inappropriate maintenance, short and long-term wear and use as well as surface contaminants (wet or dry) affects the slipperiness of flooring materials. To meet slip resistance requirement for wet conditions and/or surface contaminants (wet or dry), appropriate textured or anti-slip floor systems are recommended. Please contact Nippon Paint for further details and specifications.

\*\*The final floor finish shall follow the profile of the concrete, therefore appropriate levelling compound is recommended to treat the undulating surface.

### APPLICATION GUIDE

Mixing Ratio (by weight)	Part A : Part B 4 : 1
Number of coats	2 coats
Recommended Thickness	160 ± 20 µm per coat
Theoretical Coverage	5.5 Kg/m <sup>2</sup> /coat
Pot Life (Working time)	30 mins @ 28°C

Recoating time (28°C)	Within 10 - 24 hrs @ 28°C			
Curing time	15°C	25°C	32°C	
	Foot traffic (hrs)	24	20	18
	Light Traffic (hrs)	36	30	24
	Exposure to chemicals (days)	10	7	7
Substrate Temperature relative to dew point	≥ 3°C			
Recommended application temperature range	Minimum 15°C Maximum 35°C			
Relative Humidity	< 85%			

### SUBSTRATE REQUIREMENT

- Concrete or screed substrate should be a minimum of 25 N/mm<sup>2</sup> and adhesive pull off strength of 1.5 N/mm<sup>2</sup>, free from laitance, dust and other contamination.
- The substrate should be dried up to 85% RH as per BS8204 and free from rising damp and ground water pressure.

### SURFACE PREPARATION

- Concrete substrate must be clean, free of laitance and contaminants.
- The concrete substrate must be dry and waterproofed against negative ground water pressure.
- Appropriate moisture barrier at 2 mm thickness is recommended if the substrate moisture > 4%.
- In the event of high substrate moisture > 6%, it is recommended to apply a 5 mm thickness high compressive strength anti-osmosis epoxy mortar as moisture tolerance system.
- Allow to cure over-night before the application of subsequent painting system. Prepare the concrete substrate surface by captive shot blasting, scarifying or mechanical grinding. Repair damaged area and patch up cracks and holes using a patching compound. Cut 5mmX5mm grooves around the perimeter of the floor and at end points (eg: plinth, column, drains etc.)

### APPLICATION METHOD

#### Applying Primer

- FLOOR-PRO 106 SF EPOXY PRIMER is the recommended primer. Refer to the product TDS for details application method.

#### Applying FLOOR-PRO 305 SF EPOXY FINISH

- Mix Part A for 30 seconds using a suitable mechanical mixer at low speed (approx. 300 - 500 rpm). Add all the Part B (Hardener) into Part A and mix both liquid parts thoroughly for 2 minutes until it fully achieved a homogenous mixture
- Avoid inclusion of air during the mixing process.
- Pour the mixed material onto the primed substrate in portion, and spread with a squeegee and back roll with a roller.

#### Over-coating of FLOOR-PRO 305 SF EPOXY FINISH

- Over-coating the previous coat should be done within 1 day but preferably as soon as possible after it has been allowed for minimum of 12 hours drying.
- Exposure of the paint film to water, chemical and abrasion should be avoided as far as possible before full cure of the coating.

PACKAGING		
Components	PART A (BASE)	PART B (HARDENER)
TOTAL 25 Kg	20	5

STORAGE AND SHELF LIFE		
The product must be stored in accordance with national regulations. Keep the containers in a dry, cool, well ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.		
Components	PART A (BASE)	PART B (HARDENER)
Months	12	12

SAFETY PRECAUTION	
<ul style="list-style-type: none"> <li>▪ This product is intended for use by professional applicators. Refer to the safety information display on the container and in the safety data sheet (SDS) before using the product.</li> <li>▪ Use this product in well-ventilated area, avoid skin contact, spillage on the skin should immediately be removed with suitable cleanser, soap and water.</li> <li>▪ Eye should be well flushed with water and seek for medical attention immediately upon contact with this product.</li> <li>▪ During the application, naked flame, welding operation and smoking is not allowed. Adequate ventilation should be provided.</li> <li>▪ If you have any doubt regarding the suitability of use, refer to Nippon Paint for further advice.</li> </ul>	

DISCLAIMER
<p>The information in this data sheet is given to the best of Nippon Paint’s knowledge and practical experience. Users may consult with Nippon Paint on the general suitability of the product for their needs and specific application practices though it remains each user’s responsibility to determine the suitability of the product for the user’s particular use. The condition of the substrate and application are not within Nippon Paint’s control. Therefore no implied conditions, warranties or other terms will apply to the Product. Nippon Paint does not and cannot warrant the results which the user may obtain by using the product. In no event will Nippon Paint be liable to the user for any kind of loss (whether direct or indirect) even if Nippon Paint was previously advised of it. In line with Nippon Paint’s policy for continuous development, Nippon Paint reserves the right to modify the product and the information in this data sheet without prior notice. It is the user’s responsibility to check with Nippon Paint for the latest version of this data sheet. This data sheet has been translated into various languages. In the event of any inconsistency, the English version shall prevail.</p>